Project Profile: HMNB, Victory Jetty

Project: Victory Jetty Refurbishment - Adaptation Works

Client: Royal Navy



CONCRETE REPAIRS

The Project: Victory Jetty, located on the eastern shore of Portsmouth Harbour and situated in Her Majesty's Naval Base & Dockyard, is one of three operating bases in the UK for the British Royal Navy. Initially built in 1920, it was designed to accommodate the HMS aircraft carriers. Despite its restructuring in the 1970's, due to the increasing size and servicing needs of the UK's aircraft carriers, Victory Jetty required extensive adaptation works to the middle slip jetty, with the aim of creating a second operational birth, to accommodate both of the Royal Navy's new 66,000 tonne warships. APA Concrete Repairs Ltd were responsible for the necessary concrete cutting, concrete re-facing and concrete repair works.







The solution: Due to the complexity of the project, an extensive design phase was first undertaken in order to accurately formulate the dismantling process in such a way which allowed for each phase to be effectively carried out whilst not impacting on the next. This ensured a safe and thorough removal process without the need for additional platforms, thus saving the client significant additional access costs. An expert diving team was utilised throughout the project, to first undertake a condition survey, and to identify and record the location and extent of any visible defects prior



to the removal of large sections of the jetty. The cutting of the jetty was carried out with the use of a new underwater wire saw, uniquely designed and built by APA specifically for these works. The wire saw was lifted and lowered into the sea, where the divers then fixed it to the relevant sections of the jetty, which was continuously monitored to ensure the stability of the structure was maintained throughout. Prior to cutting, a crane was attached to each concrete section, which were then lifted out of the water and onto the deck where they were safely crushed and recycled. The divers were then redeployed underwater, equipped with smaller, underwater saws, to remove any remaining sections. APA prepared any exposed faces of saw cut sections using hydro-demolition techniques, then applied a reinforced sprayed concrete overlay to provide cover protection to the reinforcement. Sprayed and hand applied concrete repairs were carried out to other sections of the jetty structure.



The outcome: The adaptation works to Victory Jetty were completed in 2018. All sections of concrete and steel which were removed from the jetty were crushed on site to a Department of Transport grade / specification, eliminating the need for additional transportation costs, before being recycled for potential reuse as fill material in other projects on site. The range of works carried out by **APA** have contributed significantly to ensure that Victory Jetty is now the only port where the UK's two aircraft carriers can berth simultaneously.





"This programme confirms the future of Portsmouth Naval Base for the next 50 to 80 years. It will be the only port which can fully support HMS Queen Elizabeth and Prince of Wales and meet all their needs." – Capt. Iain Greenlees

For further enquires please contact:

E-mail: sales@apaconcreterepairs.co.uk

Tel: 01422 379640

Northern Office

APA House 171 Huddersfield Road Bradford West Yorkshire BD12 0TQ

Telephone: 01422 379 640

Southern Office

Nicholson House 41 Thames Street Weybridge London KT13 8JG

Telephone: 0208 853 0627

E-mail: <u>info@apaconcreterepairs.co.uk</u> Web: <u>www.apaconcreterepairs.co.uk</u>





















